

## Application Data Sheet

No.63

### **System Gas Chromatograph**

# Trace H<sub>2</sub> Analysis System Nexis GC-2030TH2 GC-2014TH2

The system enables a quantitative and qualitative analysis of H2 in municipal gas. A total of 1 valve and 2 columns are used in this GC system. N2 is used as the carrier gas. Sample is introduced into one sample loop for determination. Using a pre-column, C2-C3 components are back-flushed. The valve timing then allows O2 and N2 to directed to molecular sieve column for separation and TCD for detection. The analysis time is approximately 4 minutes. LabSolutions chromatography workstation system handles all aspects of GC control, automation, and data handling.

#### **Analyzer Information**

**System Configuration:** 

One valve / Two packed columns with one

TCD detector

**Sample Information:** 

 $H_2$ 

Methods met:

ASTM-D2504

#### **Concentration Range:**

| No. | Name of Compound | Concentration Range |            | Detector |
|-----|------------------|---------------------|------------|----------|
|     |                  | Low Conc.           | High Conc. | Detector |
| 1   | H2               | 5ppm                | 500ppm     | TCD-1    |

Detection limits may vary depending on the sample. Please contact us for more consultation.

#### **System Features**

- 5 minutes analysis for H2 analysis can be carried out
- Single TCD channel
- Good repeatability

#### **Typical Chromatograms**

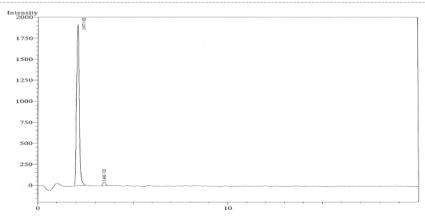


Fig. Chromatogram of TCD

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